

ABSTRACT OF THE DISCLOSURE

A real-time OS simulator simulates dispatch processing and interrupt handling of a real-time OS on a general-purpose multi-thread OS. Task threads corresponding to tasks, interrupt threads that generate an interrupt, and a controlling thread for controlling concurrent thread running on the multi-thread OS are provided. Each of the task threads, selects, when calling a system function, any thread to run next, instructs the controlling thread to start processing, and then suspends itself. After the running thread is suspended, the instructed controlling thread resumes the selected thread. Any one of the interrupt threads that called an interrupt handling function suspends the running thread, calls an interrupt handler, and then selects any thread to run next for resuming. In addition to the task threads, an exception handling thread may be assigned for each task.